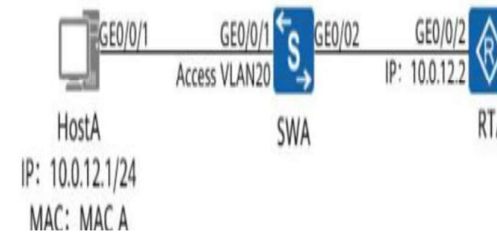


1. As shown in the following figure, the router uses a sub-interface as the gateway of the host and the IP address of the gateway is 10.0.12.2. Which of the following commands can be used to meet this requirement?

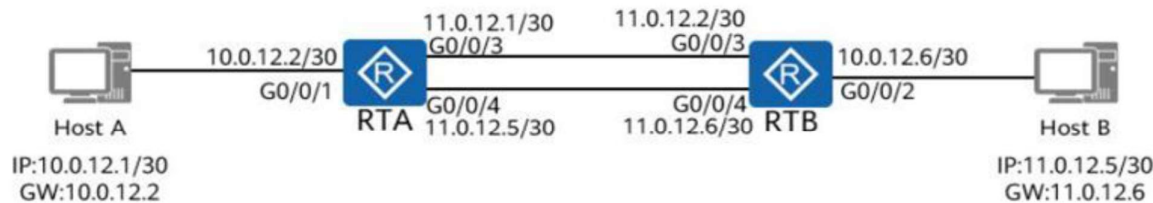
- ☒ A. interface GigabitEthernet0/0/0.20
dot1q termination vid 20
ip address 10.0.12.2 255.255.255.0
arp broadcast enable
#
- ☒ B. interface GigabitEthernet0/0/0.10
dot1q termination vid 20
ip address 10.0.12.2 255.255.255.0
arp broadcast enable
#
- ☐ C. interface GigabitEthernet0/0/0.20
dot1q termination vid 10
ip address 10.0.12.2 255.255.255.0
arp broadcast enable
..



2. Which of the following statements about VLAN design and planning on campus networks are true?

- a. Allocate consecutive VLAN 1Ds to ensure proper use of VLAN resources.
- b. Reserve a specific number of VLANs for future use.
- c. Preferentially assign VLANs based on MAC addresses. This is the most commonly used method for VLAN assignment.
- d. Preferentially assign VLANs based on ports. This is the most commonly used method for VLAN assignment.

3. On the network shown in the figure, when planning traffic, the network administrator requires that the data packets sent from host A to host B pass through G0/0/3 on the router, and the packets sent from host B to host A pass through G0/0/4 on the router. Which of the following commands can be used to meet this requirement?



- A. Router A : ip route—static 10.0.12.5 255.255.255.252 11.0.12.2
Router B : ip route—static 10.0.12.1 255.255.255.252 11.0.12.5
- B. Router A : ip route—static 10.0.12.5 255.255.255.252 11.0.12.6
Router B : ip route—static 10.0.12.1 255.255.255.252 11.0.12.1
- C. Router A : ip route-static 0.0.0.0 0.0.0.0 11.0.12.2
Router B : ip route—static 0.0.0.0 0.0.0.0 11.0.12.5
- D. Router A : ip route—static 0.0.0.0 0.0.0.0 11.0.12.6
Router B : ip route—static 0.0.0.0 0.0.0.0 11.0.12.1

4. Which of the following parameters must be considered during root port selection in STP

- A. Cost to the root switch.
- B. Port priority.
- C. Slot ID of the port, such as G0/0/1.
- D. Port MAC address.
- E. Port duplex mode.

5. Virtualization is the foundation of Network Functions Virtualization (NFV). Which of the following statements correctly describe virtualization?

- A. Multiple VMs can concurrently run on a single physical server.
- B. VMs on the same physical Server are isolated from each other.
- C. VMs are decoupled from hardware and can be migrated between servers.
- D. VMs run on the same operating system and are separated by namespaces.

6. Refer to the following display ip routing-table command output on the router R1. Which of the following statements are true?

```
<R1>display ip routing-table
Route Flags: R - relay, D - download to fib
-----
Routing Tables: Public
  Destinations : 10      Routes : 10

Destination/Mask    Proto    Pre  Cost    Flags NextHop          Interface
10.0.0.0/8          Static   60    0        RD   10.0.12.2          Ethernet0/0/0
10.0.2.2/32         Static   70    0        RD   10.0.21.2          Ethernet0/0/1
```

- ☒ A. The outbound interface from R1 to 10.0.0.1 is Ethernet0/0/0.
- ☐ B. The outbound interface from R1 to 10.0.0.1 is Ethernet0/0/1.
- ☐ C. The outbound interface from R1 to 10.0.2.2 is Ethernet0/0/0.
- ☒ D. The outbound interface from R1 to 10.0.2.2 is Ethernet0/0/1.

7. Which of the following VRP commands can be used to enter area 0 view?

- ☐ A. [Huawei]ospf area 0
- ☒ B. [Huawei-ospf-1]area 0
- ☒ C. [Huawei-ospf-1]area 0.0.0.0
- ☐ D. [Huawei-ospf-1]area 0 enable

8. Which of the following frequency bands are supported by IEEE 802.11n?

☒ A. 2.4 GHz

☐ B. 2.5 GHz

☒ C. 5 GHz

☐ D. 6 GHz

9. Refer to the following figure showing the RADIUS configuration of a router. Which of the following statements about the configuration are true?

```
#
radius-server template huawei
radius-server shared-key cipher huawei
radius-server authentication 200.0.12.1 1812
radius-server accounting 200.0.12.1 1813
radius-attribute nas-ip 200.0.12.2
#
```

☒ A. The IP address of the authentication server is 200.0.12.1.

☐ B. The IP address of the authorization server is 200.0.12.1.

☒ C. The IP address of the accounting server is 200.0.12.1.

☒ D. The source IP address of the RADIUS packets sent by the router is 200.0.12.2.

10. If the IPv4 address of a host on a LAN is 192.168.1.1/30, the host will process IP packets with specific destination IP addresses. Which of the following IP addresses may be the destination IP addresses?

- ☒ A. 192.168.1.1
- ☐ B. 192.168.1.2
- ☒ C. 192.168.1.3
- ☒ D. 255.255.255.255

11. Which of the following statements are true about the default route?

- ☒ A. If the destination address of a packet does not match any entry in the routing table, the packet is forwarded through the default route.
- ☒ B. In a routing table, the route to 0.0.0.0 (with the mask being 0.0.0.0) is the default route.
- ☐ C. The routing table of any router must contain the default route.
- ☐ D. The default route can only be manually configured by the administrator.

12. In STP, which of the following items may affect the selection of the root switch?

- ☒ A. Switch priority.
- ☐ B. Switch port ID.
- ☐ C. Switch interface bandwidth.
- ☒ D. Switch MAC address.
- ☐ E. Switch IP address.

13. In which of the following scenarios does the Forward Delay timer exist?

- ☐ A. The STP-enabled port transitions from Disabled to Blocking.
- ☐ B. The STP-enabled port transitions from Blocking to Listening.
- ☒ C. The STP-enabled port transitions from Listening to Learning.
- ☒ D. The STP-enabled port transitions from Learning to Forwarding.
- ☐ E. The STP-enabled port transitions from Forwarding to Disabled.

14. Which of the following MAC addresses cannot be used as the MAC addresses of host network adapters?

☐ A. 00-02-03-04-05-06

☒ B. 01-02-03-04-05-06

☐ C. 02-03-04-05-06-07

☒ D. 03-04-05-06-07-08

15. Which of the following statements about IPv6 anycast addresses are true?

A. Packets destined for an anycast address are sent to the nearest interface identified based on the routing distance.

B. Anycast and unicast addresses use the same address space.

C. IPv6 anycast addresses provide redundancy functions for services.

D. IPv6 anycast addresses implement load balancing for services.

16. Which of the following statements about the "S" field in the MPLS packet header are true?

- ☒ A. The field indicates whether there are other labels behind the current label. 0: Yes; 1: No.
- ☐ B. The field indicates whether there are other labels behind the current label. 1: Yes; 0: No.
- ☒ C. The "S" field exists in each MPLS packet header.
- ☐ D. The "S" field is 1 bit long in frame mode and 2 bits long in cell mode.

17. Which of the following statements about the process of establishing a PPP link are false?

- ☐ A. The physical layer is unavailable during the Dead phase. When two communicating devices detect that the physical link between them is activated, PPP enters the Establish phase from the Dead phase.
- ☐ B. In the Establish phase, the two devices perform LCP negotiation over a PPP link. This is done to negotiate the maximum receive unit (MRU), authentication mode, and magic number.
- ☐ C. In the Network phase, the two devices perform NCP negotiation. This is done to select and configure a network layer protocol and to negotiate network-layer parameters.
- ☒ D. After NCP negotiation is successful, the PPP link maintains the communication state and enters the Terminate phase.
- ☒ E. The PPP link can work in half-duplex or full-duplex mode.

18. Which of the following statements about SNMP versions are true?

- ☒ A. SNMPv3 packets can be authenticated and encrypted.
- ☐ B. SNMPv2c packets can be authenticated and encrypted.
- ☒ C. SNMPv2c adds two more operations to the five protocol operations defined in SNMPv1.
- ☐ D. SNMPv1 uses UDP as the transport layer protocol, whereas SNMPv2c and SNMPv3 use TCP as the transport layer protocol. Therefore, SNMPv1 is more reliable.

19. Typical network forwarding is based on routing tables. OpenFlow-capable switches forward packets based on flow tables. Which of the following statements correctly describe these two forwarding modes?

- ☒ A. A routing table has fixed fields. A device has only one public routing table.
- ☐ B. A flow table has fixed fields. A network device has only one flow table.
- ☒ C. According to a routing table, packets will be forwarded using the route to the destination network segment and with the longest mask.
- ☒ D. According to a flow table, packets can be forwarded based on only the MAC address and IP address.

20. Refer to the display startup command output shown in the figure. Which of the following statements are true?

```
<Huawei>display startup
MainBoard:
Startup system software:      flash:/AR2220E-V200R007C00SPC600.cc
Next startup system software: flash:/AR2220E-V200R007C00SPC600.cc
Backup system software for next startup: null
Startup saved-configuration file: flash:/vrpcfg.zip
Next startup saved-configuration file: flash:/backup.zip
Startup license file:         null
Next startup license file:    null
Startup patch package:        null
Next startup patch package:   null
Startup voice-files:          null
Next startup voice-files:     null
```

- ☒ A. The current VRP version file is the same as that used for next startup.
- ☐ B. The current VRP version file is different from that used for next startup.
- ☐ C. The current VRP configuration file is the same as that used for next startup.
- ☒ D. The current VRP configuration file is different from that used for next startup.

21. Typical network forwarding is based on routing tables. OpenFlow-capable switches forward packets based on flow tables. Which of the following statements correctly describe these two forwarding nodes?

- ☒ A. A routing table has fixed fields. A device has only one public routing table.
- ☐ B. A flow table has fixed fields. A network device has only one flow table.
- ☒ C. According to a routing table, packets will be forwarded using the route to the destination network segment and with the longest mask.
- ☐ D. According to a flow table, packets can be forwarded based on only the MAC address and IP address.

22. What are the ACL categories based on ACL rules?

- ☒ A. Basic ACL
- ☒ B. Advanced ACL
- ☒ C. Layer 2 ACL
- ☒ D. User ACL

23. Which of the following statements about the " ip route-static 10.0.2.2 255.255.255.255 10.0.12.2 preference 20" command is true?

- ☐ A. The destination network address of the route is 10.0.12.2/32.
- ☐ B. The preference of the route is 100.
- ☒ C. The route must exist in the routing table.
- ☒ D. The mask length of the destination network address of the route is 32 bits.

24. Which of the following network types are supported by OSPF?

- ☒ A. Broadcast
- ☒ B. Point-to-point (P2P)
- ☒ C. NBMA
- ☒ D. Point-to-multipoint (P2MP)

25. Which of the following statements are true about the TTL field in an IPv4 header?

- ☒ A. The TTL value decreases by 1 each time a packet passes through a Layer 3 device.
- ☒ B. The TTL field length is 8 bits.
- ☒ C. When a routing loop occurs, the TTL value can be used to prevent infinite packet forwarding.
- ☒ D. The TTL value is in the range from 0 to 255.

26. Which of the following methods can be used to add APs on an AC?

- ☒ A. Import APs when they are offline.
- ☒ B. Configure the AC to automatically discover APs.
- ☐ C. Manually confirm APs in the list of unauthorized APs.
- ☒ D. Add APs when they are online.

27. The network administrator has decided to configure link aggregation in the enterprise network. Which of the following represent advantages of link aggregation ?

- ☒ A. Load balancing.
- ☒ B. Improved bandwidth.
- ☒ C. Enhanced reliability.
- ☐ D. Improved security.

28. Which of the following application-layer protocols are based on TCP?

- ☐ A. Ping
- ☐ B. TFTP
- ☒ C. FTP
- ☒ D. HTTP packet

29. Which of the following modes are supported by link aggregation?

- ☒ A. Manual load balancing mode
- ☒ B. LACP mode
- ☐ C. Hybrid mode
- ☐ D. Manual active/standby mode

30. If the value of Length/Type in an Ethernet data frame is 0x8100, which of the following can be the payload of the data frame?

- ☒ A. ARP packets
- ☒ B. ICMP packets
- ☒ C. TCP datagrams
- ☒ D. UDP data

31. Refer to the following figure showing the configuration of a router. Which of the following statements about the configuration are true?

```
#
aaa
 authentication-scheme default
 authentication-scheme huawei
 authentication-mode radius
 authorization-scheme default
 authorization-scheme huawei
 accounting-scheme default
 domain default
 domain default_admin
 domain huawei
 authentication-scheme huawei
 authorization-scheme huawei
 local-user huawei password cipher 123456
 local-user huawei@huawei password cipher 654321
#
```

- ☐ A. The authentication mode of the domain named huawei is local authentication.
- ☒ B. The authorization mode of the domain named huawei is local authorization.
- ☒ C. No accounting scheme is used in the domain named huawei.
- ☐ D. If the user name huawei is used for authentication, the password must be 654321.

32. Refer to the following display ip routing-table command output on the router R1. Which of the following statements are true?

```
<R1>display ip routing-table
Route Flags: R - relay, D -
-----
Routing Tables: Public
  Destinations : 10

Destination/Mask    Proto
 10.0.0.0/8         Static
 10.0.2.2/32        Static
```

32. Which of the following are not main functions of routers ?

- ☒ A. Routers forward data packets based on source IP addresses.
- ☐ B. Routers learn routes through multiple routing protocols and add them to the routing table.
- ☒ C. Routers enable devices on the same network segment to communicate with each other.
- ☐ D. Routers forward data packets according to routing tables.

33. Link aggregation is a common technique in enterprise network. Which of the following description is the advantages of link aggregation?

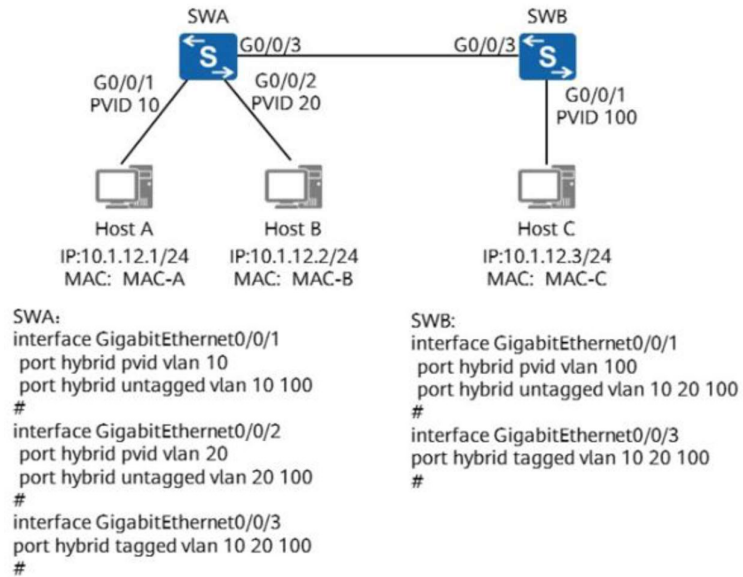
- ☒ A. Improves link bandwidth.
- ☒ B. Implements load sharing.
- ☒ C. Improves network reliability.
- ☐ D. Facilitates data copy for analysis.

34. According to the command output shown in the figure, which of the following statements are true?

```
#
interface GigabitEthernet0/0/1
  port link-type trunk
  port trunk allow-pass vlan 2 to 4094
#
```

- ☐ A. GigabitEthernet0/0/1 does not allow packets of VLAN 1 to pass through.
- ☒ B. GigabitEthernet0/0/1 allows packets of VLAN 1 to pass through.
- ☒ C. To configure GigabitEthernet0/0/1 as an access interface, first run the undo port trunk allow-pass vlan all command.
- ☒ D. To configure GigabitEthernet0/0/1 as an access interface, first run the undo port trunk allow-pass vlan 2 to 4094 command.

35. Refer to the following configurations of SWA and SWB. Which of the following mappings between MAC addresses, VLANs, and interfaces are true in MAC address tables of SWA and SWB?



MAC Address	VLAN	Port
MAC-A	10	GE0/0/1
MAC-B	20	GE0/0/2
MAC-C	100	GE0/0/3

☒ B. SWB:

MAC Address	VLAN	Port
MAC-A	10	GE0/0/3
MAC-B	20	GE0/0/3
MAC-C	100	GE0/0/1

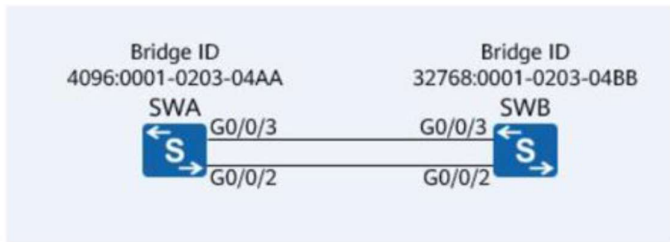
☐ C. SWB:

MAC Address	VLAN	Port
MAC-A	100	GE0/0/3
MAC-B	200	GE0/0/3
MAC-C	100	GE0/0/1

☐ D. SWA:

MAC Address	VLAN	Port
MAC-A	10	GE0/0/3
MAC-B	20	GE0/0/3

36. As shown in the figure, STP has been enabled on the two switches. Which of the following statements are true?



- ☒ A. The two ports of SWA are designated ports.
- ☐ B. The two ports of SWB are designated ports.
- ☒ C. G0/0/2 of SWA is in Forwarding state.
- ☒ D. G0/0/3 of SWA is in Forwarding state.
- ☒ E. G0/0/2 of SWB is in Forwarding state.

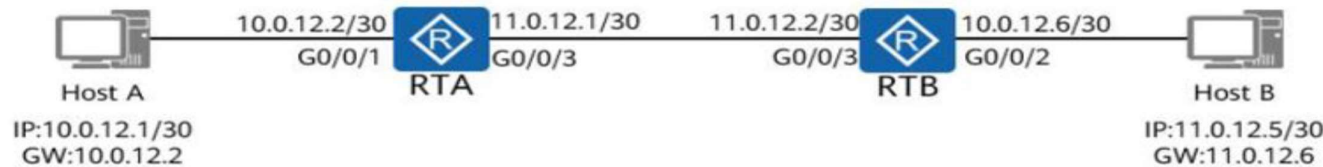
37. Which of the following planes does a network device have?

- ☒ A. Control plane
- ☒ B. Data plane
- ☒ C. Management plane
- ☐ D. Service plane

38. Which of the following parts compose SNMP?

- ☒ A. NMS
- ☐ B. Agent process
- ☒ C. Managed object
- ☒ D. Management Information Base (MIB)

39. On the network shown in the figure, which of the following commands can be used to enable host A to successfully ping host B?



- ☒ A. Router A : ip route-static 10.0.12.5 255.255.255.252 11.0.12.2
Router B : ip route-static 10.0.12.1 255.255.255.252 11.0.12.1
- ☒ B. Router A : ip route-static 0.0.0.0 0.0.0.0 11.0.12.2
Router B : ip route-static 0.0.0.0 0.0.0.0 11.0.12.1
- ☐ C. Router A : ip route-static 0.0.0.0 0.0.0.0 11.0.12.1
Router B : ip route-static 0.0.0.0 0.0.0.0 11.0.12.2
- ☐ D. Router A : ip route-static 10.0.12.5 255.255.255.252 11.0.12.1
Router B : ip route-static 10.0.12.1 255.255.255.252 11.0.12.2

40. A DHCP server in the enterprise network is being used to allocate IP addresses to hosts. An administrator discovers however that some hosts are obtaining IP addresses outside of the scope of the DHCP server's address pool. What are the possible reasons for this?

- ☒ A. Another DHCP server exists in the network and is allocating IP addresses to hosts that happen to be within a closer proximity than the authorized DHCP server.
- ☒ B. The hosts were unable to discover a DHCP server and therefore generated their own address in the 169.254.0.0 address range.
- ☐ C. The hosts were unable to discover a DHCP server and therefore generated their own address in the 127.254.0.0 address range.
- ☒ D. All addresses from the DHCP pool have been assigned.

41. Which of the following are true about the Ethernet data frame with the "Length/Type" field being 0x0806?

- ☒ A. The data frame is an Ethernet II frame.
- ☐ B. The data frame is an IEEE 802.3 frame.
- ☒ C. The destination MAC address of the data frame must be FFFF-FFFF-FFFF.
- ☒ D. The source MAC address of the data frame is definitely not FFFF-FFFF-FFFF.

42. In STP, which of the following items may affect the selection of the root switch?

- ☒ A. Switch priority.
- ☐ B. Switch port ID.
- ☐ C. Switch interface bandwidth.
- ☒ D. Switch MAC address.
- ☐ E. Switch IP address.

43. In the following figure, after OSPF is enabled on the two routers, the silent-interface s0/0/0 command is run on RTA. Given this, which of the following statements are true?



- ☒ A. RTA continues to receive, analyze, and process the OSPF packets sent by RTB.
- ☒ B. The OSPF neighbor relationship between the two routers goes down.
- ☐ C. The OSPF neighbor relationship between the two routers is not affected.
- ☒ D. RTA no longer sends OSPF packets.

44. Which of the following are not main functions of routers?

- ☒ A. Routers forward data packets based on source IP addresses.
- ☐ B. Routers learn routes through multiple routing protocols and add them to the routing table.
- ☒ C. Routers enable devices on the same network segment to communicate with each other.
- ☐ D. Routers forward data packets according to routing tables.

45. Refer to the following display interface command output on a device. Which of the following statements are true?

```
<Huawei>display interface GigabitEthernet 0/0/0
GigabitEthernet0/0/0 current state : UP
Line protocol current state : UP
Route Port, The Maximum Transmit Unit is 1000
Internet Address is 10.0.12.2/24
IP Sending Frames' Format is PKTFMT_ETHNT_2, Hardware address is 00e0-fc22-4fff
Port Mode: FORCE COPPER
Speed : 100, Loopback: NONE
Duplex: FULL, Negotiation: DISABLE
Mdi : AUTO
Last 300 seconds input rate 24 bits/sec, 0 packets/sec
Last 300 seconds output rate 24 bits/sec, 0 packets/sec
```

- ☒ A. The IP address of the interface is 10.0.12.2/24.
- ☐ B. The working rate of the interface is 1 Gbit/s.
- ☒ C. The MTU of the interface is 1000 bytes.
- ☒ D. The MAC address of the interface is 00e0-fc22-4fff.

46. Which of the following statements regarding single area OSPF are correct?

- ☐ A. An IP address needs to be configured on a loopback interface of each router before configuring an OSPF area.
- ☒ B. The value of an area can be from 0.0.0.0 to 255.255.255.255.
- ☒ C. A single area can be configured using any supported area number.
- ☒ D. All of the links of the network need to be advertised in Area 0.

46. Refer to the following figure showing the configuration of a router. Which of the following statements about the configuration are true

```
#
aaa
 authentication-scheme default
 authentication-scheme huawei
   authentication-mode radius
 authorization-scheme default
 authorization-scheme huawei
 accounting-scheme default
 domain default
 domain default_admin
 domain huawei
   authentication-scheme huawei
   authorization-scheme huawei
 local-user huawei password cipher 123456
 local-user huawei@huawei password cipher 654321
#
```

- ☐ A. The authentication mode of the domain named huawei is local authentication.
- ☒ B. The authorization mode of the domain named huawei is local authorization.
- ☒ C. No accounting scheme is used in the domain named huawei.
- ☐ D. If the user name huawei is used for authentication, the password must be 654321.

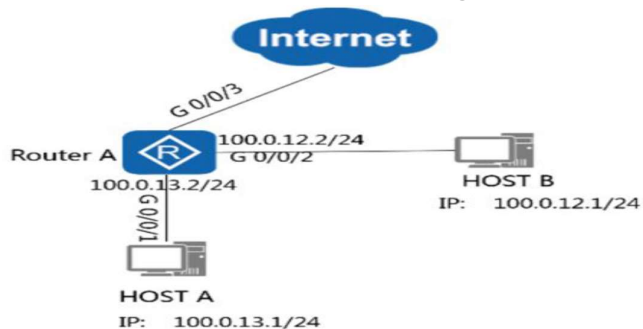
47. On Sx7 series switches, which of the following VLANs can be removed by using command "undo"?

- ☐ A. vlan 1.
- ☒ B. vlan 2.
- ☒ C. vlan 1024.
- ☒ D. vlan 4094.

48. Which of the following statements about IPv6 address configuration are true?

- ☐ A. IPv6 addresses can only be manually configured.
- ☒ B. IPv6 addresses support stateless autoconfiguration.
- ☒ C. DHCPv6 assignment is supported for IPv6 addresses.
- ☒ D. IPv6 addresses can be automatically configured in multiple modes.

50. On the network shown in the figure, which of the following configurations can enable host A to access the Internet but prevent host B from accessing the Internet?



☒ A. acl number 2000
rule 5 deny source 100.0.12.0 0.0.0.255
rule 10 permit source 100.0.13.0 0.0.0.255

interface GigabitEthernet0/0/3
traffic-filter outbound acl 2000

```
traffic-filter outbound acl 2000
#
```

☒ B. acl number 2000
rule 5 permit source 100.0.13.0 0.0.0.255
rule 10 deny source 100.0.12.0 0.0.0.255

interface GigabitEthernet0/0/3
traffic-filter outbound acl 2000
#

☒ C. acl number 2000
rule 5 permit source 100.0.13.0 0.0.0.255
rule 10 deny

interface GigabitEthernet0/0/3
traffic-filter outbound acl 2000
#

☒ D. acl number 2000
rule 5 deny source 100.0.12.0 0.0.0.255
rule 10 permit

interface GigabitEthernet0/0/3
traffic-filter outbound acl 2000
#

51. Which of the following types of packets are used for IPv6 stateless address autoconfiguration?

A. RA

B. RS

C. NA

D. NS

52. On Huawei devices, which of the following methods can be used in OSPF router ID selection?

- ☒ A. If a loopback interface is configured, the largest IP address of the loopback interface is selected as the router ID.
- ☒ B. If loopback interfaces are not configured, the largest IP address of an interface is selected as the router ID.
- ☒ C. A Huawei switch may use the largest IP address of VLANIF interfaces as the router ID.
- ☐ D. The default ID 127.0.0.1 is selected as the router ID.
- ☒ E. A valid router ID can be configured manually.

53. Which of the following statements are true about the OSPF neighbor status?

- ☒ A. The master/slave relationship of OSPF is formed in the ExStart state.
- ☒ B. The sequence number of DD packets is determined in the Exchange state.
- ☒ C. In the Exchange state, routers send DD packets that briefly describe link state information to each other to describe the content of the local link state database (LSDB).
- ☒ D. After LSDB synchronization is completed, the router state changes to Full.

54. Which of the following statements about the "S" field in the MPLS packet header are true?

- ☒ A. The field indicates whether there are other labels behind the current label. 0: Yes; 1: No.
- ☐ B. The field indicates whether there are other labels behind the current label. 1: Yes; 0: No.
- ☒ C. The "S" field exists in each MPLS packet header.
- ☐ D. The "S" field is 1 bit long in frame mode and 2 bits long in cell mode.

55. Which of the following MAC addresses cannot be used as the MAC addresses of host network adapters?

- ☐ A. 00-02-03-04-05-06
- ☒ B. 01-02-03-04-05-06
- ☐ C. 02-03-04-05-06-07
- ☒ D. 03-04-05-06-07-08

56. To enable the FTP server function on a router, set the user name and password to "huawei", and set the FTP root directory to "flash:/dhcp/", which of the following commands must be configured?

- ☒ A. ftp server enable
- ☒ B. local-user huawei password cipher huawei
- ☒ C. local-user huawei ftp-directory flash:/dhcp/
- ☒ D. local-user huawei service-type ftp

57. Which of the following parts compose SNMP?

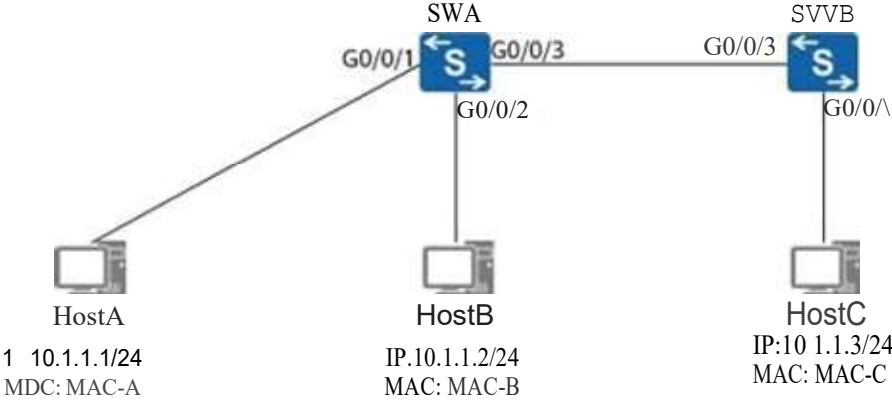
- ☒ A. NMS
- ☐ B. Agent process
- ☒ C. Managed object
- ☒ D. Management Information Base (MIB)

58. Which of the following network parameters can be allocated using DHCP?

- ☒ A. IP address
- ☒ B. Gateway address
- ☒ C. Address of the DNS server
- ☐ D. Operating system

59. Which of the following statements about SNMP versions are true?

60. Assuming that all hosts in the following figure can communicate with each other, which of the following statements are true?



- ☐ A. Three MAC addresses have been learnt on G0/0/3 of SWA.
- ☒ B. G0/0/3 of SWB learns two MAC addresses.
- ☐ C. G0/0/3 of SWA learns two MAC addresses.
- ☒ D. G0/0/3 of SWA learns one MAC address.

61. After receiving a Join Request packet from an AP during CAPWAP tunnel setup, an AC checks the validity of the AP. Which of the following authentication modes are supported by the AC?

- ☒ A. MAC address authentication
- ☒ B. SN authentication
- ☒ C. No authentication
- ☐ D. Password authentication

62. Which of the following parameter settings must be consistent on two devices for an OSPF adjacency to be established?

- ☐ A. Router Priority
- ☒ B. Router Dead Interval
- ☒ C. Router ID
- ☐ D. Area ID

63. Which of the following parameters must be considered during root port selection in STP?

- ☒ A. Cost to the root switch.
- ☒ B. Port priority.
- ☒ C. Slot ID of the port, such as G0/0/1.
- ☐ D. Port MAC address.
- ☐ E. Port duplex mode.

64. On the network shown in the figure, SWA and Router A are connected through two links. The two links are aggregated in manual load balancing mode, and the number of the aggregated interface is 1. If the aggregated link needs to tag outgoing packets with VLAN 100 and the trunk link needs to be configured on SWA, which of the following configurations need to be performed on SWA?



- ☒ A. interface Eth-Trunk1
port link-type trunk
port trunk allow-pass vlan 100

interface GigabitEthernet0/0/1
eth-trunk 1

interface GigabitEthernet0/0/2
eth-trunk 1
#
- ☐ B. interface Vlanif100
ip address 10.0.12.1 255.255.255.0
#
- ☐ C. interface Eth-Trunk1
mode lacp-static
port link-type trunk
port trunk allow-pass vlan 100

interface GigabitEthernet0/0/1
eth-trunk 1

interface GigabitEthernet0/0/2
eth-trunk 1
#
- ☒ D. interface Eth-Trunk1
ip address 10.0.12.1 255.255.255.0
#

65. Which of the following statements about OSPF DD packets *and* LSAs are true?

- ☐ A. A DD packet contains detailed LSA information.
- ☐ B. A DD packet contains only LSA headers.
- ☒ C. An LSA header uniquely identifies an LSA.
- ☒ D. An LSA header is only a part of an LSA.

66. Which of the following routing protocols are dynamic routing protocols?

- ☐ A. Static routing
- ☐ B. Direct routing
- ☒ C. OSPF
- ☒ D. BGP

67. An ACL rule is as follows. Which of the following IP addresses can be matched by the permit rule*
rule S permit ip source 10.0.1.0 0.0.254.255

- ☒ A. 10.0.1.2
- ☐ B. 10.0.2.3
- ☒ C. 10.0.3.4
- ☐ D. 10.0.4.5

68. What are the functions of OSPF hello packets ?

- ☒ A. Discover neighbors.
- ☐ B. Update LSAs.
- ☒ C. Maintain OSPF neighbor relationships.
- ☐ D. Synchronize the LSDB.

69. Which of the following route entries can be aggregated into 10.0.0.24 /29 ?

- ☒ A. 10.0.0.25/30
- ☐ B. 10.0.0.23/30
- ☒ C. 10.0.0.26/30
- ☐ D. 10.0.0.22/30

70. An ACL rule is as follows. Which of the following IP addresses can be matched by the permit rule*
rule 5 permit ip source 10.1.1.0 255.0.254.255

- ☒ A. 9.1.1.1
- ☐ B. 8.2.2.1
- ☐ C. 7.1.2.1
- ☒ D. 6.1.3.1

71. Which of the following statements are used to correctly describe the Network Functions Virtualization (NFV) architecture?

- ☒ A. The Virtualized Infrastructure Manager (VIM) is responsible for managing the virtualized infrastructure.
- ☒ B. The Virtualized Network Function Manager (VNFM) is responsible for lifecycle management of VNFs.
- ☒ C. The NFV Orchestrator (NFVO) is responsible for service orchestration.
- ☒ D. Management and orchestration (MANO) consists of the NFVO, VNFM, and VIM.

72. Refer to the following figure showing the configuration of a router. Which of the following statements about the configuration are true?

```
#
aaa
 authentication-scheme default
 authentication-scheme huawei
   authentication-mode radius
 authorization-scheme default
 authorization-scheme huawei
 accounting-scheme default
 domain default
 domain default_admin
 domain huawei
   authentication-scheme huawei
   authorization-scheme huawei
 local-user huawei password cipher 123456
 local-user huawei@huawei password cipher 654321
#
```

- ☐ A. The authentication mode of the domain named huawei is local authentication.
- ☒ B. The authorization mode of the domain named huawei is local authorization.
- ☒ C. No accounting scheme is used in the domain named huawei.
- ☐ D. If the user name huawei is used for authentication, the password must be 654321.

73. Which of the following statements about the routing table shown in the figure are true?

```
<R1>display ip routing-table
Route Flags: R - relay, D - download to fib
-----
Routing Tables: Public
  Destinations : 14      Routes : 15

Destination/Mask    Proto   Pre  Cost   Flags NextHop         Interface
10.0.2.2/32         Static  60    0       RD  10.0.12.2         Ethernet0/0/0
10.0.3.3/32         Static  60    0       RD  10.0.2.2           Ethernet0/0/0
10.0.12.0/24        Direct  0     0        D  10.0.12.1          Ethernet0/0/0
10.0.12.1/32        Direct  0     0        D  127.0.0.1          Ethernet0/0/0
```

- ☐ A. The next hop in the route to the destination network 10.0.3.3/32 is not directly connected. Therefore, the local router does not forward data packets destined for 10.0.3.3.
- ☒ B. The local router forwards data packets destined for 10.0.3.3 from Ethernet0/0/0.
- ☒ C. The local router forwards data packets destined for 10.0.2.2 from Ethernet0/0/0.
- ☒ D. The local router forwards data packets destined for 10.0.12.1 from Ethernet0/0/0.

74. What are the advantages of using DHCP to allocate IP addresses*

- ☐ A. DHCP provides heavy workload and is difficult to manage.
- ☒ B. DHCP can prevent IP address conflicts.
- ☒ C. IP addresses can be reused.
- ☒ D. If the configuration information changes, for example, the DNS server address changes, the administrator only needs to modify the configuration information on the DHCP server, facilitating unified management.

75. Which of the following parameters are used for STP calculation on a switching network running STP?

- ☒ A. Bridge ID
- ☒ B. Port ID.
- ☒ C. Root path cost
- ☐ D. Forward Delay

76. Which of the following types of packets are used for IPv6 stateless address autoconfiguration?

- ☒ A. RA
- ☒ B. RS
- ☒ C. NA
- ☒ D. NS

77. Which of the following statements are true about the TTL field in an IPv4 header?

- ☒ A. The TTL value decreases by 1 each time a packet passes through a Layer 3 device.
- ☒ B. The TTL field length is 8 bits.
- ☒ C. When a routing loop occurs, the TTL value can be used to prevent infinite packet forwarding.
- ☒ D. The TTL value is in the range from 0 to 255.

78. Which of the following are features of the OSPF protocol?

- ☐ A. Routing loops are likely to occur.
- ☒ B. Triggered update is supported.
- ☐ C. The shortest path is calculated based on the number of hops.
- ☒ D. Area division is supported.

79. What packet types are included in DHCP?

- ☒ A. DHCP Discover packet
- ☒ B. DHCP Offer packet
- ☒ C. DHCP Request packet
- ☐ D. DHCP Rollover packet

80. Which of the following descriptions regarding the STP forwarding state is incorrect?

- ☐ A. A port in a forwarding state can receive BPDU.
- ☐ B. A port in a forwarding state does not learn the source MAC address of a frame.
- ☐ C. A port in a forwarding state can forward frames.
- ☒ D. A port in a forwarding state can send BPDU.

81. Which of the following statements are used to correctly describe the Network Functions Virtualization (NFV) architecture?

- ☒ A. The Virtualized Infrastructure Manager (VIM) is responsible for managing the virtualized infrastructure.
- ☒ B. The Virtualized Network Function Manager (VNFM) is responsible for lifecycle management of VNFs.
- ☒ C. The NFV Orchestrator (NFVO) is responsible for service orchestration.
- ☒ D. Management and orchestration (MANO) consists of the NFVO, VNFM, and VIM.

82. Which of the following application- layer protocols are based on TCP

- ☐ A. Ping
- ☐ B. TFTP
- ☒ C. FTP
- ☒ D. HTTP packet

83. Which of the following elements are included in a routing table?

- ☒ A. Destination/Mask
- ☒ B. Protocol
- ☒ C. Cost
- ☒ D. Next-hop address
- ☒ E. Interface

84. An administrator currently manages AR2200 devices in the network through a single password, however the company wishes to introduce another two administrators and provide unique user credentials and privilege levels for telnet access to the network devices. What action can be taken?

- ☒ A. Configure three users under the AAA-view, and assign each a different password.
- ☒ B. The authentication mode must be changed to AAA.
- ☒ C. Each administrator must be assigned a privilege level.
- ☐ D. A public IP address must be assigned to each user for telnet access.

85. Which of the following commands can be used to query OSPF configurations of a device?

☒ A. display current-configuration

☒ B. In the OSPF protocol view:
display this

☐ C. dis ip routing-table

☐ D. display ospf peer

86. Which of the following are Layer 2ACLs?

☐ A. rule 10 permit l2-protocol arp

☒ B. rule 15 permit vlan-id 100

☒ C. rule 20 permit source-mac 0203-0405-0607

☐ D. rule 25 permit source 192.168.1.1 0.0.0.0

87. Which of the following parameter settings must be consistent on two devices for an OSPF adjacency to be established?

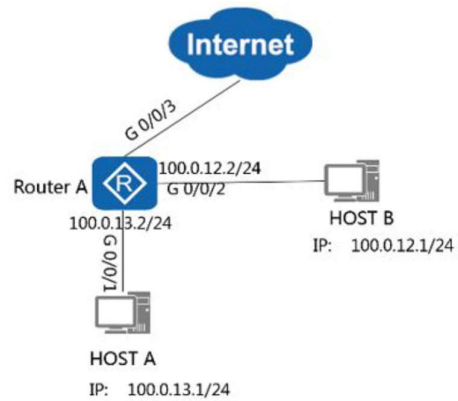
☐ A. Router Priority

☒ B. Router Dead Interval

☐ C. Router ID

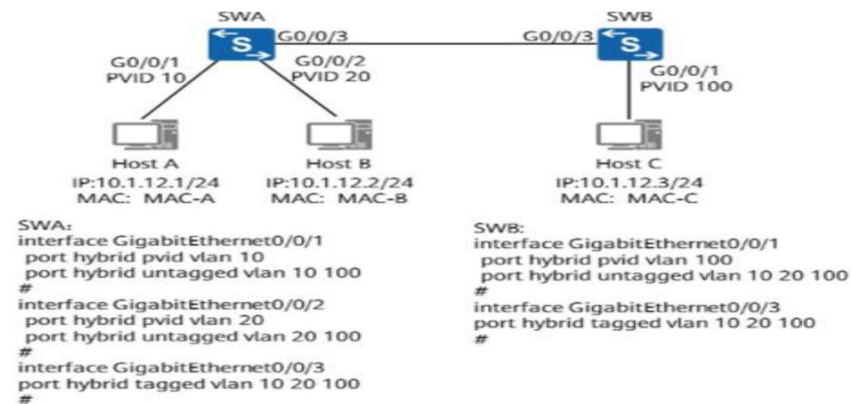
☒ D. Area ID

88. On the network shown in the figure, which of the following configurations can enable host A to access the Internet but prevent host B from accessing the Internet?



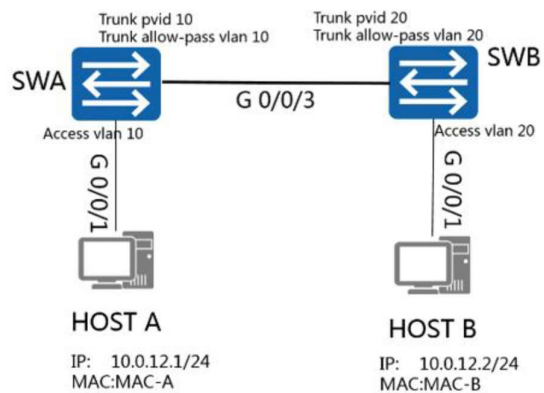
- ☒ A. `acl number 2000`
`rule 5 deny source 100.0.12.0 0.0.0.255`
`rule 10 permit source 100.0.13.0 0.0.0.255`
`#`
`interface GigabitEthernet0/0/3`
`traffic-filter outbound acl 2000`
`#`
- ☒ B. `acl number 2000`
`rule 5 permit source 100.0.13.0 0.0.0.255`
`rule 10 deny source 100.0.12.0 0.0.0.255`
`#`
`interface GigabitEthernet0/0/3`
`traffic-filter outbound acl 2000`
`#`
- ☒ C. `acl number 2000`
`rule 5 permit source 100.0.13.0 0.0.0.255`
`rule 10 deny`
`#`
`interface GigabitEthernet0/0/3`
`traffic-filter outbound acl 2000`
`#`
- ☒ D. `acl number 2000`
`rule 5 deny source 100.0.12.0 0.0.0.255`
`rule 10 permit`
`#`
`interface GigabitEthernet0/0/3`
`traffic-filter outbound acl 2000`
`#`

89. Which of the following statements about configurations of SWA and SWB are true?



- ☒ A. Host A and Host B cannot ping each other.
- ☒ B. Host A and Host C can ping each other.
- ☒ C. Host B and Host C can ping each other.
- ☐ D. All hosts can ping each other.

90. On the network shown in the figure, the ports connecting switch A and switch B to hosts belong to VLAN 10 and VLAN 20 respectively. The ports through which the two switches are interconnected are trunk ports, and the PVIDs of the ports are 10 and 20, respectively. Which of the following statements are true?



- ☐ A. Host A and host B belong to different VLANs and cannot ping each other.
- ☒ B. Host A and host B can ping each other.
- ☒ C. When the data frames sent by the hosts are forwarded between the switches, the frames are untagged.
- ☐ D. ARP requests from host A cannot be forwarded to host B.

91. Which of the following MAC addresses can be used as the MAC addresses of host network adapters?

- ☐ A. 00-02-03-04-05-06
- ☒ B. 01-02-03-04-05-06
- ☐ C. 02-03-04-05-06-07
- ☒ D. 03-04-05-06-07-08

92. Which of the following port states are included in Rapid Spanning Tree Protocol (RSTP)?

- ☒ A. Forwarding
- ☒ B. Learning
- ☒ C. Discarding
- ☐ D. Listening

93. The PPPoE session establishment process can be divided into which stages?

- ☒ A. Discovery stage.
- ☐ B. DHCP stage.
- ☒ C. PPPoE Session stage.
- ☐ D. PPP connecting stage.

94. On Huawei devices, which of the following methods can be used in OSPF router ID selection*

- ☒ A. If a loopback interface is configured, the largest IP address of the loopback interface is selected as the router ID.
- ☒ B. If loopback interfaces are not configured, the largest IP address of an interface is selected as the router ID.
- ☒ C. A Huawei switch may use the largest IP address of VLANIF interfaces as the router ID.
- ☐ D. The default ID 127.0.0.1 is selected as the router ID.
- ☒ E. A valid router ID can be configured manually.

95. Refer to the output of the display current-configuration configuration ospf and display ospf peer commands on the router R1. Which of the following statements are false?

```
<R1>display current-configuration configuration ospf
#
ospf 1 router-id 10.0.1.1
 area 0.0.0.0
   network 10.0.12.0 0.0.0.3
   network 10.0.12.0 0.0.0.255
#
return
<R1>display ospf peer

OSPF Process 1 with Router ID 10.0.12.1
Neighbors

Area 0.0.0.0 interface 10.0.12.1(GigabitEthernet0/0/0)'s neighbors
Router ID: 10.0.2.2 Address: 10.0.12.2
State: Full Mode:Nbr is Slave Priority: 1
DR: 10.0.12.2 BDR: 10.0.12.1 MTU: 0
Dead timer due in 30 sec
Retrans timer interval: 5
Neighbor is up for 00:01:48
Authentication Sequence: [ 0 ]
```

- ☐ A. It can be determined that R1 is faulty because the incorrect router ID has been configured.
- ☐ B. R1's router ID is 10.0.1.1.
- ☒ C. R1's router ID is 10.0.12.1.
- ☒ D. Area authentication is enabled on R1.

96. Which of the following statements are incorrect

- ☐ A. The preferences for each static routes entry can be different.
- ☐ B. By default, OSPF maintains preference over RIP.
- ☒ C. The greater the cost, the better the route is.
- ☒ D. For those routes to the same destination on VRP platform, the route with a higher preference value is more preferred over the route with a lower preference value.

97. Which of the following modes are supported by link aggregation?

- ☒ A. Manual load balancing mode
- ☒ B. LACP mode
- ☐ C. Hybrid mode
- ☐ D. Manual active/standby mode

98. The network administrator has decided to configure link aggregation in the enterprise network Which of the following represent advantages of link aggregation*

- ☒ A. Load balancing.
- ☒ B. Improved bandwidth.
- ☒ C. Enhanced reliability.
- ☐ D. Improved security.

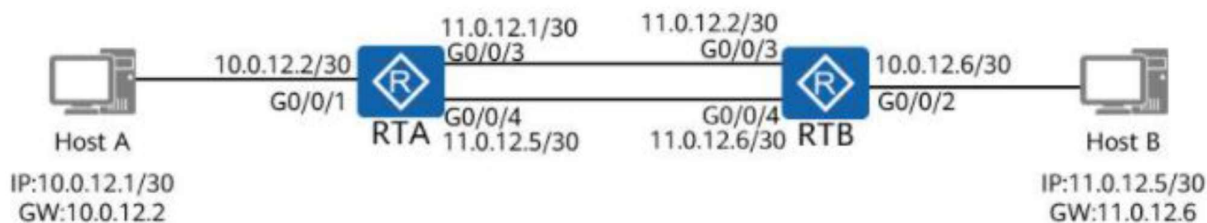
99. What are the advantages of OSPF?

- ☐ A. OSPF supports Classless Inter-Domain Routing (CIDR).
- ☐ B. OSPF can load balance traffic among equal-cost routes.
- ☒ C. OSPF supports area partition.
- ☒ D. OSPF supports packet authentication.

100. Which of the following fields exist in both IPv6 and IPv4 packet headers?

- ☒ A. Source Address
- ☒ B. Destination Address
- ☒ C. Version
- ☐ D. Next Header

101. On the network shown in the figure, when planning traffic, the network administrator requires that the data packets sent from host A to host B pass through G0/0/3 on the router, and the packets sent from host B to host A pass through G0/0/4 on the router. Which of the following commands can be used to meet this requirement?



- ☒ A. Router A : ip route-static 10.0.12.5 255.255.255.252 11.0.12.2
Router B : ip route-static 10.0.12.1 255.255.255.252 11.0.12.5
- ☐ B. Router A : ip route-static 10.0.12.5 255.255.255.252 11.0.12.6
Router B : ip route-static 10.0.12.1 255.255.255.252 11.0.12.1
- ☒ C. Router A : ip route-static 0.0.0.0 0.0.0.0 11.0.12.2
Router B : ip route-static 0.0.0.0 0.0.0.0 11.0.12.5
- ☐ D. Router A : ip route-static 0.0.0.0 0.0.0.0 11.0.12.6
Router B : ip route-static 0.0.0.0 0.0.0.0 11.0.12.1

102. Which of the following are basic parameters for configuring a static route ?

- ☒ A. Destination network
- ☒ B. Next-hop IP address
- ☒ C. Outbound interface
- ☐ D. MAC address of the outbound interface

103. Refer to the following output of the display ospf interface verbose command on the router R1. Which of the following statements are true?

```
<R1>display ospf interface verbose

OSPF Process 1 with Router ID 10.0.1.1
  Interfaces

Area: 0.0.0.0          (MPLS TE not enabled)

Interface: 10.0.12.1 (GigabitEthernet0/0/0)
Cost: 1      State: BDR      Type: Broadcast      MTU: 1500
Priority: 1
Designated Router: 10.0.12.2
Backup Designated Router: 10.0.12.1
Timers: Hello 10 , Dead 40 , Poll 120 , Retransmit 5 , Transmit Delay 1
IO Statistics
  Type      Input      Output
  Hello      66          65
  DB Description      2          3
  Link-State Req      0          1
  Link-State Update    3          2
  Link-State Ack       2          2
ALLSPF GROUP
ALLDR GROUP
OpaqueId: 0  PrevState: Waiting
Effective cost: 1, enabled by OSPF Protocol
```

- ☒ A. R1's router ID is 10.0.1.1.
- ☒ B. R1 is the BDR.
- ☒ C. The cost of GigabitEthernet0/0/0 is 1.
- ☐ D. The DR priority of GigabitEthernet0/0/0 is 10.

104. Which of the following operations are mandatory to restore the factory default settings of an AR2200 router?

- ☒ A. Resetting saved configurations
- ☐ B. Clearing the current configuration
- ☒ C. Restarting the AR2200 router
- ☒ D. Specifying the configuration file for next startup

105. As shown in the following figure the router Loses a sub-interface as the gateway of the host and the IP address of the gateway is 10.0.12.2. Which of the following commands can be used to meet this requirement?



- ☒ A. interface GigabitEthernet0/0/0.20
dot1q termination vid 20
ip address 10.0.12.2 255.255.255.0
arp broadcast enable
#
- ☒ B. interface GigabitEthernet0/0/0.10
dot1q termination vid 20
ip address 10.0.12.2 255.255.255.0
arp broadcast enable
#
- ☐ C. interface GigabitEthernet0/0/0.20
dot1q termination vid 10
ip address 10.0.12.2 255.255.255.0
arp broadcast enable
#
- ☐ D. interface GigabitEthernet0/0/0.10
dot1q termination vid 10
ip address 10.0.12.2 255.255.255.0

106. Which of the following statements about the "S" field in the MPLS packet header are true*

- ☒ A. The field indicates whether there are other labels behind the current label. 0: Yes; 1: No.
- ☐ B. The field indicates whether there are other labels behind the current label. 1: Yes; 0: No.
- ☒ C. The "S" field exists in each MPLS packet header.
- ☐ D. The "S" field is 1 bit long in frame mode and 2 bits long in cell mode.

107. Which of the following statements about IPv6 anycast addresses are true?

- ☐ A. Packets destined for an anycast address are sent to the nearest interface identified based on the routing distance.
- ☒ B. Anycast and unicast addresses use the same address space.
- ☒ C. IPv6 anycast addresses provide redundancy functions for services.
- ☒ D. IPv6 anycast addresses implement load balancing for services.

108. Which of the following statements about IPv6 address configuration are true ?

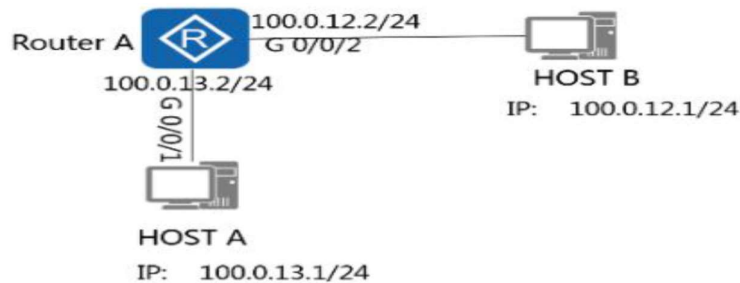
- ☐ A. IPv6 addresses can only be manually configured.
- ☒ B. IPv6 addresses support stateless autoconfiguration.
- ☒ C. DHCPv6 assignment is supported for IPv6 addresses.
- ☒ D. IPv6 addresses can be automatically configured in multiple modes.

109. Typical network forwarding is based on routing tables. OpenFlow-capable switches forward packets based on flow tables.

Which of the following statements correctly describe these two forwarding modes?

- ☒ A. A routing table has fixed fields. A device has only one public routing table.
- ☐ B. A flow table has fixed fields. A network device has only one flow table.
- ☒ C. According to a routing table, packets will be forwarded using the route to the destination network segment and with the longest mask.
- ☒ D. According to a flow table, packets can be forwarded based on only the MAC address and IP address.

50. In the network shown in the figure, which of the following configurations can forbid host A to access the HTTP service of host B and forbid host B to access the FTP service of host A?



- ☒ A. `acl number 3000`
 `rule 5 deny tcp source 100.0.13.0 0.0.0.255 destination 100.0.12.0 0.0.0.255 destination-port eq www`
 `#`
 `acl number 3001`
 `rule 5 deny tcp source 100.0.12.0 0.0.0.255 destination 100.0.13.0 0.0.0.255 destination-port eq ftp`
 `#`
 `interface GigabitEthernet0/0/1`
 `traffic-filter inbound acl 3000`
 `#`
 `interface GigabitEthernet0/0/2`
 `traffic-filter inbound acl 3001`
 `#`

```
interface GigabitEthernet0/0/1
 traffic-filter outbound acl 3000
#
interface GigabitEthernet0/0/2
 traffic-filter outbound acl 3001
#
```

- ☒ C.

```
acl number 3000
 rule 5 deny tcp source 100.0.12.0 0.0.0.255 source-port eq www destination 100.0.13.0 0.0.0.255
#
acl number 3001
 rule 5 deny tcp source 100.0.13.0 0.0.0.255 source-port eq ftp destination 100.0.12.0 0.0.0.255
#
interface GigabitEthernet0/0/1
 traffic-filter outbound acl 3000
#
interface GigabitEthernet0/0/2
 traffic-filter outbound acl 3001
#
```
- ☐ D.

```
acl number 3000
 rule 5 deny tcp source 100.0.12.0 0.0.0.255 source-port eq www destination 100.0.13.0 0.0.0.255
#
acl number 3001
 rule 5 deny tcp source 100.0.13.0 0.0.0.255 source-port eq ftp destination 100.0.12.0 0.0.0.255
#
interface GigabitEthernet0/0/1
 traffic-filter inbound acl 3000
#
interface GigabitEthernet0/0/2
 traffic-filter inbound acl 3001
#
```

111. On Huawei AR G3 Series routers, Which authentication modes does AAA support?

- ☒ A. None.
- ☒ B. Local.
- ☒ C. Radius.
- ☐ D. 802.1X.

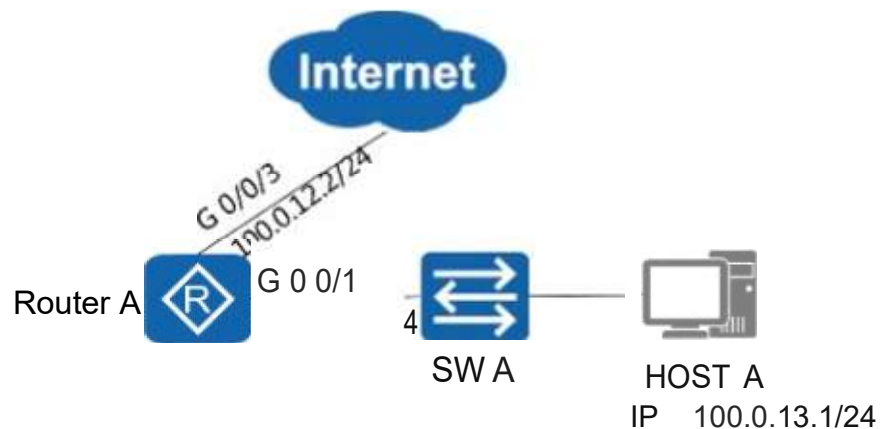
112. Refer to the following display interface command output on a device. Which of the following statements are true?

!1 A. The Ip address of the interface is 10.0.12.2/24.

```
<Huawei>display interface GigabitEthernet 0/0/0
GigabitEthernet0/0/0 current state : UP
Line protocol current state : UP
Route Port, The Maximum Transmit Unit is 1000
Internet Address is 10.0.12.2/24
IP Sending Frames' Format is PKTFMT_ETHNT_2, Hardware address is 00e0-fc22-4fff
Port Mode: FORCE COPPER
Speed : 100, Loopback: NONE
Duplex: FULL, Negotiation: DISABLE
Mdi : AUTO
Last 300 seconds input rate 24 bits/sec, 0 packets/sec
Last 300 seconds output rate 24 bits/sec, 0 packets/sec
```

- ☒ A. The IP address of the interface is 10.0.12.2/24.
- ☐ B. The working rate of the interface is 1 Gbit/s.
- ☒ C. The MTU of the interface is 1000 bytes.
- ☒ D. The MAC address of the interface is 00e0-fc22-4fff.

113. On the network shown in the following figure, it is required that Router A reject OSPF and ICMP packets received on G0/0/1. Which of the following configurations meet this requirement?



- ☒ A. acl number 3000
rule 5 deny ospf
rule 10 deny icmp

interface GigabitEthernet0/0/1
traffic-filter inbound acl 3000
#
- ☒ B. acl number 3000
rule 5 deny 89
rule 10 deny 1

interface GigabitEthernet0/0/1
traffic-filter inbound acl 3000
#
- ☐ C. acl number 2000
rule 5 deny 89
rule 10 deny 1

interface GigabitEthernet0/0/1
traffic-filter inbound acl 2000
#
- ☒ D. acl number 3000
rule 5 deny 89
rule 10 deny icmp

interface GigabitEthernet0/0/1
traffic-filter inbound acl 3000
#

114. By referring to the routing table of the router R1 shown in the figure, which of the following statements are truer

```

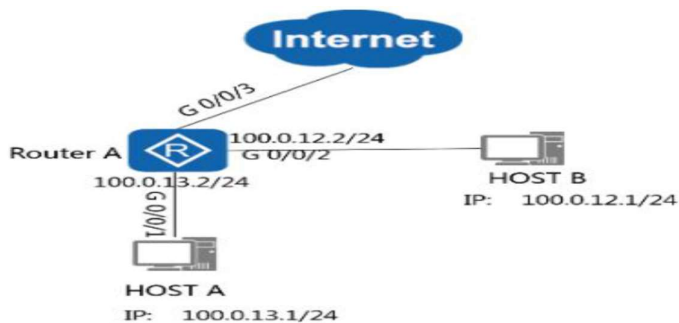
<R1>display ip routing-table
Route Flags: R - relay, D - download to fib
-----
Routing Tables: Public
  Destinations : 13      Routes : 13

Destination/Mask    Proto   Pre  Cost   Flags NextHop         Interface
0.0.0.0/0           Static  60    0       RD   10.0.14.4       GigabitEthernet0/0/0
10.0.0.0/8           Static  60    0       RD   10.0.12.2       Ethernet0/0/0
10.0.2.0/24          Static  60    0       RD   10.0.13.3       Ethernet0/0/2
10.0.2.2/32          OSPF    10    50      RD   10.0.21.2       Ethernet0/0/1

```

- ☐ A. The router discards the data packets destined for 11.0.0.0/8.
- ☒ B. The router forwards the data packets destined for 12.0.0.0/8.
- ☒ C. The router forwards the data packets destined for 11.0.0.0/8 from GigabitEthernet0/0/0.
- ☐ D. The router forwards the data packets destined for 12.0.0.0/8 from Ethernet0/0/0.

115. On the network shown in the figure, which of the following configurations can enable host A to access the Internet but prevent host B from accessing the internet?



☒ A. acl number 2000
rule 5 deny source 100.0.12.0 0.0.0.255
rule 10 permit source 100.0.13.0 0.0.0.255

interface GigabitEthernet0/0/3
traffic-filter outbound acl 2000
#

☒ B. acl number 2000
rule 5 permit source 100.0.13.0 0.0.0.255
rule 10 deny source 100.0.12.0 0.0.0.255

interface GigabitEthernet0/0/3
traffic-filter outbound acl 2000
#

☒ C. acl number 2000
rule 5 permit source 100.0.13.0 0.0.0.255
rule 10 deny

interface GigabitEthernet0/0/3
traffic-filter outbound acl 2000
#

☒ D. acl number 2000
rule 5 deny source 100.0.12.0 0.0.0.255
rule 10 permit

interface GigabitEthernet0/0/3
traffic-filter outbound acl 2000
#

116. Which of the following user authentication modes are supported on a WLAN*

- ☒ A. 802.1X authentication
- ☐ B. MAC address authentication
- ☒ C. Portal authentication
- ☒ D. RADIUS authentication

116. Virtualization is the foundation of Network Function Virtualization (NFV). Which of the following statements correctly describe virtualization ?

- ☒ A. Multiple VMs can concurrently run on a single physical server.
- ☒ B. VMs on the same physical server are isolated from each other.
- ☒ C. VMs are decoupled from hardware and can be migrated between servers.
- ☐ D. VMs run on the same operating system and are separated by namespaces.

117. Which of the following are Layer 2 ACLs?

- ☐ A. rule 10 permit l2-protocol arp
- ☒ B. rule 15 permit vlan-id 100
- ☒ C. rule 20 permit source-mac 0203-0405-0607
- ☐ D. rule 25 permit source 192.168.1.1 0.0.0.0

118. Which of the following information is relevant to the data transmission rate of an Eth-Trunk in manual mode?

- ☒ A. Bandwidth of its member interfaces
- ☐ B. Whether IP addresses are configured for its member interfaces
- ☐ C. Whether its member interfaces reside on a public or private network
- ☒ D. Quantity of member interfaces

119. Which of the following are not main functions of routers ?

- ☒ A. Routers forward data packets based on source IP addresses.
- ☐ B. Routers learn routes through multiple routing protocols and add them to the routing table.
- ☒ C. Routers enable devices on the same network segment to communicate with each other.
- ☐ D. Routers forward data packets according to routing tables.

120. Which of the following methods can be used to add APs on an AC?

- ☐ A. Import APs when they are offline.
- ☒ B. Configure the AC to automatically discover APs.
- ☐ C. Manually confirm APs in the list of unauthorized APs.
- ☒ D. Add APs when they are online.

121. Which of the following network parameters can be allowed using DHCP?

- ☒ A. IP address
- ☒ B. Gateway address
- ☒ C. Address of the DNS server
- ☐ D. Operating system

122. If the IPv4 address of a host on a LAN is 192.168.1.1/30, the host will process IP packets with specific destination IP addresses. Which of the following IP addresses may be the destination IP addresses?

☒ A. 192.168.1.1

☐ B. 192.168.1.2

☒ C. 192.168.1.3

☒ D. 255.255.255.255

123. Which of the following frequency bands are supported by IEEE 802.11 n?

☒ A. 2.4 GHz

☐ B. 2.5 GHz

☒ C. 5 GHz

☐ D. 6 GHz

124. Which of the following statements about collision domains and broadcast domains are correct?

- ☒ A. Devices connected to the same Hub form a collision domain.
- ☒ B. Devices connected to the same hub form a broadcast domain.
- ☐ C. Devices connected to the same bridge form a collision domain.
- ☒ D. Devices connected to the same bridge form a broadcast domain.
- ☐ E. Devices connected to the same router form a broadcast domain.

125. After receiving a Join Request packet from an AP during CAPWAP tunnel setup, an AC checks the validity of the AP. Which of the following authentication modes are supported by the AC?

- ☒ A. MAC address authentication
- ☒ B. SN authentication
- ☒ C. No authentication
- ☐ D. Password authentication

126. Which of the following IEEE 802.11 standards support the 5 GHz frequency band?

☒ A. 802.11a

☒ B. 802.11n

☒ C. 802.11ax

☐ D. 802.11g

127. Which of the following port status may exist on an STP-enabled switch?

☒ A. Forwarding

☒ B. Listening

☒ C. Discarding

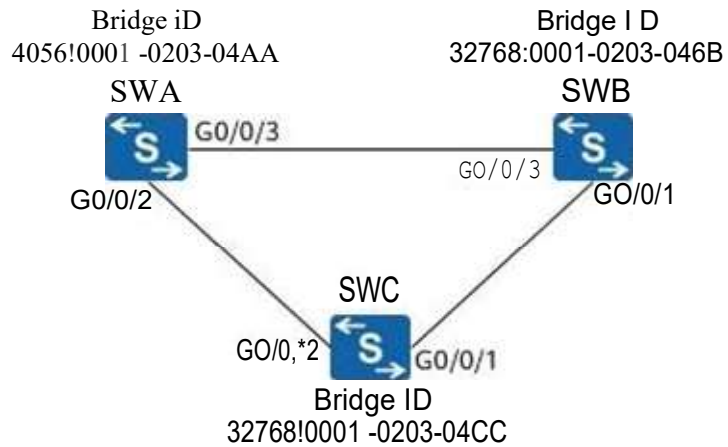
☐ D. Disabled

128. SWA and SWB run RSTP. Which of the following statements are true?



- ☒ A. G0/0/3 of SWA is a designated port.
- ☐ B. G0/0/3 of SWB is a backup port.
- ☐ C. G0/0/3 of SWB is an alternate port.
- ☒ D. G0/0/2 of SWA is a designated port.

130. On the switching network shown in the figure, all switches run STP and other configurations of the switches retain factory settings. When the network topology is stable, which of the following statements are true?



- ☒ A. SWA is the root bridge on the network.
- ☐ B. SWB is the root bridge on the network.
- ☒ C. G0/0/1 and G0/0/3 on SWB are in Forwarding state.
- ☐ D. G0/0/1 and G0/0/2 on SWC are in Forwarding state.

131. The PPPoE session establishment process can be divided into which stages?

- ☒ A. Discovery stage.
- ☐ B. DHCP stage.
- ☒ C. PPPoE Session stage.
- ☐ D. PPP connecting stage.

132. An administrator wants to update the VRP software version on a Huawei router. Which of the following methods are available?

- ☒ A. The administrator configures a Huawei router as an FTP client and transmits the VRP software through FTP.
- ☐ B. The administrator configures a Huawei router as an FTP server and transmits the VRP software through FTP.
- ☐ C. The administrator configures a Huawei router as a TFTP server and transmits the VRP software through TFTP.
- ☒ D. The administrator configures a Huawei router as a TFTP client and transmits the VRP software through TFTP.

133. Which of the following fields in an IPv4 header are related to fragmentation ?

- ☒ A. Identification
- ☒ B. Flags
- ☒ C. Fragment Offset
- ☐ D. TTL

134. Which of the following statements are used to correctly describe the Network Functions Virtualization (NFV) architecture?

- ☒ A. The Virtualized Infrastructure Manager (VIM) is responsible for managing the virtualized infrastructure.
- ☒ B. The Virtualized Network Function Manager (VNFM) is responsible for lifecycle management of VNFs.
- ☒ C. The NFV Orchestrator (NFVO) is responsible for service orchestration.
- ☒ D. Management and orchestration (MANO) consists of the NFVO, VNFM, and VIM.

135. Refer to the following display ip routing-table command output on the router R1. Which of the following statements are true?

```
(R1)display ip routing-table
Route flags: R - relay, D - download to fib
```

```
Routing Tables: Public
  Destinations : 10          Routes : 10
```

Destination/Wask	Proto	Pre	Cost	flags	NextHop	Interface
10.0.0.0/8	Static	60	0	RD	10.0.12.2	Ethernet0/0/0
10.0.2.2/32	Static	70	0	RD	10.0.21.2	Ethernet0/0/1

- ☒ A. The outbound interface from R1 to 10.0.0.1 is Ethernet0/0/0.
- ☐ B. The outbound interface from R1 to 10.0.0.1 is Ethernet0/0/1.
- ☐ C. The outbound interface from R1 to 10.0.2.2 is Ethernet0/0/0.
- ☒ D. The outbound interface from R1 to 10.0.2.2 is Ethernet0/0/1.

136. Which of the following statements are true about the TTL field in an IPv4 header?

- ☒ A. The TTL value decreases by 1 each time a packet passes through a Layer 3 device.
- ☒ B. The TTL field length is 8 bits.
- ☒ C. When a routing loop occurs, the TTL value can be used to prevent infinite packet forwarding.
- ☒ D. The TTL value is in the range from 0 to 255.

137. To implement network-layer functions on a VLANIF interface, which of the following need to be configured on the interface?

- ☒ A. IP address
- ☒ B. Subnet mask
- ☐ C. MAC address
- ☐ D. IP prefix

138. Which of the following port states are included in Rapid Spanning Tree Protocol (RSTP)?

☒ A. Forwarding

☒ B. Learning

☒ C. Discarding

☐ D. Listening